



Comments of SDG&E on the Renewable Energy Transmission Initiative (RETI) Phase 1A Draft Report

SDG&E appreciates the opportunity to comment on the March 14, 2008 RETI Phase 1A Draft Report ("Draft Report") and the companion February 27, 2008 presentation entitled "Renewable Energy Transmission Initiative, Phase 1A Status Report". SDG&E's initial comments are as follows:

1. According to the presentation, the CEC staff's November, 2007 forecast assumes that the CSI goal of 3000 MW will be reached by 2016. "Form 1.4 - Statewide" (page 42) in the CEC staff's forecast indicates a statewide total "New PV Installations" of 370 MW by year 2016. Assuming a 50% derate factor between installed capacity and effective capacity at time of peak, this implies about 740 MW of installed PV capacity; well short of the Draft Report's assumption of 3000 MW by year 2016.

SDG&E recommends that the methodologies and results of the CEC staff's November, 2007 forecast and the presentation's forecast be compared and reconciled. The two reports' findings appear incompatible, and each may affect future State policy.

2. In the presentation, "FTR/CRRs" are listed under the heading "Variable Costs" for transmission. The words "no cost/value assumption" appears next to the term "FTR/CRRs". Presumably, this statement means that FTR/CRRs will be ignored for purposes of this study, which is the correct approach since FTR/CRRs are hedging instruments which do not change the underlying cost-effectiveness of potential renewable resource additions. SDG&E requests that RETI confirm SDG&E's presumption.

3. The Draft Report proposes to define two sets of "Value" for potential renewable resources: "Energy Value" and "Capacity Value". According to the presentation, "Energy Value" is to be defined as the hourly "market price" for energy in 15 different pricing zones using a "commercially available production cost model". However, it is not clear whether this production cost model incorporates the WECC transmission network so that grid constraints can be simultaneously accounted for when dispatching generation. SDG&E recommends that the model explicitly incorporate the WECC transmission network to reflect market price differences between different pricing zones. The hourly market clearing prices are set by the highest variable cost generator(s) selected by the production cost model to run. This means that a renewable

resource with very low variable operating costs (e.g., wind and solar) will earn hourly market revenues far in excess of their variable operating costs. The differential, or producer surplus, represents a contribution to the fixed revenue requirements associated with the capital investment made to develop the renewable resource. The producer surplus, therefore, represents a payment for the "Capacity Value" of the renewable resource.

However, the Draft Report proposes to impute additional "Capacity Value" by assigning a second revenue stream equal to the "fixed carrying costs of a simple cycle gas turbine". (page 3-28) Presumably the methodology in the Draft Report assumes that this is the payment a Load Serving Entity (LSE) would make to the renewable resource in order to count the renewable resource's capacity for Resource Adequacy purposes. Therefore, SDG&E submits that the methodology, as drafted, may substantially over-value certain renewable resources relative to others by assuming renewable resources will earn revenues at the market price for energy AND revenues at the full fixed cost of a gas-turbine. At one extreme, the market price for energy will encapsulate BOTH the "Energy Value" and the full "Capacity Value" of the renewable resource over its life.

SDG&E recommends that RETI develop an objective approach for determining—over the economic life of potential renewable resources—what portion of the fixed costs of a gas turbine (up to and including \$0) best approximates the incremental revenues that a renewable resource owner could consistently earn in a competitive market.

4. The presentation proposes to include proposed transmission projects in the Base Case provided the Transmission projects are "approved by all necessary regulatory agencies". SDG&E finds this statement to be overly broad and contradicted by information in the Draft Report (see Table 3-6 at page 3-13 indicating that certain Tehachapi area upgrades, the Sunrise Powerlink and Devers-Palo Verde #2 will be included in the "Base Case"). A transmission project which has received approval by the CAISO should be viewed as highly likely to proceed and should be included in the base case. Further, the RETI process should acknowledge that currently pending projects should be evaluated under current requirements and rules.

5. As a general matter, SDG&E recommends that the RETI process use the production cost/grid constraint modeling envisioned under item 3 above to investigate the ability of the existing WECC grid to accommodate various levels of increased renewable resource development around the WECC. Only after the capability of the existing grid is understood, does it make sense to consider new transmission to import energy into California. By assuming "all non-California renewable generation will require new high voltage transmission" (page 3-23), RETI is creating a significant artificial disadvantage for potentially attractive out-of-state renewable CREZs.